30th Congress, 1st Session. [SENATE.] Miscellaneous. No. 51.

MEMORIAL

OF

ROBERT MILLS,

RESPECTING

A new route to the Pacific ocean, with a plan for the transportation of despatches to Astoria in fifteen days.

February 15, 1848.
Referred to the Committee on the Library, and ordered to be printed.

To the honorable the Senate and House of Representatives of the United States in Congress assembled:

The undersigned respectfully would lay before your honorable body a plan for facilitating intelligence from the seat of government to our Pacific territory, by which public despatches may be transmitted to Astoria, in the Oregon territory, in the shortest possible time, which may not exceed fifteen days, and with an outlay little exceeding that allowed now for the transmission of the mail by the way of Chagres to Astoria.

The simplicity and practicability of the plan here proposed are such, and it being calculated to benefit the whole country, that your memorialist would believe that when known to your honorable body, you would cause it to be carried into execution with as little delay as possible; and your memorialist would therefore respectfully submit the annexed papers explanatory of the plan, and its advantages over every other plan yet suggested for expediting public despatches to our ports on the Pacific, and eventually opening the great highway of nations across our country to the commerce of the Indies.

In view of the public importance of this subject, your memorialist would pray your honorable body to order a survey of the work, and if found practicable, to carry out the plans here proposed with as little delay as possible.

And, as in duty bound, your memorialist would ever pray.

ROBERT MILLS,
Engineer and Architect.

City of Washington, *December*, 1847.

Accompanying this memorial is a diagram map of North America, exhibiting the relative position of important commercial points on both oceans, and showing the various routes proposed between the Atlantic and Pacific oceans, from the headwaters of the Missouri to the isthmus of Darien.

Tippin & Streeper, printers.

A large map of the Rio Grande river will also be annexed, showing the natural powers of this stream for steamboat navigation 700 miles above its mouth, and to within about 400 miles of the navigable waters of the gulf of California, as surveyed by an officer of the United States army, in a steamboat, in 1846.

R. M.

MILLS'S ROUTES TO THE PACIFIC.

Since the joint occupancy of our Oregon possessions has ceased, immigration from the States has increased with surprising rapidity, and the necessity has been imposed upon us to facilitate our intercourse with this distant portion of our territory; the question, therefore, which now agitates the public mind, is, by what means, and in what direction, can an overland intercommunication be easiest and most economically effected? We have witnessed, with pain, the tediousness and exposure to which immigrants are now subject in passing by the present route; and we naturally inquire, "Is there not a safer, more direct, and shorter line of travel for our people to reach our possessions on the Pacific?"

The commercial world has, ever since the discovery of the western continent, been seeking a shorter passage to the Pacific, and to India and China, than by doubling Cape Horn, or the Cape of Good Hope. Millions of money have been lavished to effect a northwest passage to the western ocean, without avail; and failing in this, commercial Europe has turned its attention to opening a passage through the mountains of the South American isthmus which divide the two oceans; but however flattering this scheme appears, no success has attended any of the efforts made to realize this commercial passage across; and could it be effected, it could not compete with the facilities offered, through our own country, to secure such overland communication with the Pacific.

The isthmuses of Darien, Nicaragua, and Tehuantepec are too remote, too far down *south*, to accommodate the great demands of commerce flowing from Europe, and from our own country, to the Pacific; and it never would take this equinoctial route if it had another, not only more direct but in a healthier clime.

Our proximity with the Pacific ocean would always give us the advantages of its trade, if we but open a commercial highway through our own country overland to this ocean, which would enable us to effect the passage in at least the same time with other routes named; then shall we make it the interest of all commercial nations to pass by this route, and thus shall we become the recipients of this trade, and bring all nations into commerce with us.

Since the introduction of steam as a commercial agent, land conveyance has been rendered as cheap as water transportation, and the safety and despatch which attend the former will render its use more general, and for safety to be preferred.

Even should a ship canal be made through one of the southern isthmuses named, the preference would be given the more northern route here proposed, on account of the advantages it would possess, both on the ground of economy, despatch and safety. When we consider the loss of

time consequent upon sailing a distance of 4,000 miles, and 20 days additional steaming, via the Panama canal, or by Cape Horn, the present route, a distance of 24,000 miles, and the saving of 120 days' sail, (steaming such a distance being too expensive,) we must be convinced of the vast advantages derived to commerce by opening a route through our own country. We shall say nothing of those benefits which would accrue to us as a people by having this vast trade passing through our cities, for each of these marts would become the depositories of this trade.

Under this view of the subject, we should not delay a moment to enter upon this glorious work, especially as ample means are at hand to insure its execution at an early day.

The wisdom and patriotism of the national councils are invoked to apply these means, and thus make this highway, what it really should be, a national work.

The public lands through which this road-way would pass, would be amply sufficient to reimburse all expenses incurred on the work, and when it went into operation it would sustain itself. The expediency of appropriating such public lands for this purpose, would be not only conceded on the ground of its national importance, but of the value of the commerce it would secure.

The opening of a speedy communication with our Oregon territory must be admitted to be of paramount importance, and worthy the attention of the Congress of the nation; and as the first expenses of the work, on the plan here proposed, will require an expenditure of little more than the appropriation already made for carrying the mail across the continent to our Pacific possessions, it will require but the act of Congress, to authorize the Postmaster General to appropriate these means, to consummate this plan of communication with our Pacific territories.

It is announced in the public journals that the telegraph company will effect a telegraphic communication with the city of Charleston by December, and with the city of New Orleans by January or February next, (1848;) which will enable the government to send a despatch so far on its route to the Pacific. At this point a steamboat is proposed to start with it, and ascend the Rio Grande to Laredo, (on our side of the river,) to which it is always navigable for boats drawing four to five feet water. At this point it is proposed to construct a line of telegraph (of about 400 miles) across to the gulf of California, to which point the written despatch would be transmitted, where another steamboat would be ready to convey it to Astoria, touching at Mazatlan, San Diego, Monterey, San Francisco, or any other points north on the Pacific; and, if required, another steamboat may convey intelligence down south to the ports on the South American Pacific coast. If greater despatch is required, the ocean steamer may be stationed at the port of San Diego, with which a telegraphic line would be opened; and to the point where it would start from on the gulf a steamboat may ascend, say to the mouth of the great Colorado river, which lies nearly in the same latitude with San Diego—say between 32 and 33 degrees—and but a short distance between, (about 50 to 60 miles.)

By this plan the government despatches may be transmitted to our Oregon possessions, and back, in an incredibly short time, as well as commercial information.

The route of the Rio Grande is one of, if not the most important point of communication with the Pacific that could be presented for adoption,

whether regarded for its economy or its domestic value, from its being in our midst, where every step of the route would enhance the value of the public and private lands through or near which it would pass—a route which would be open all the year round, and, passing through a high and healthy region, would be soon filled by an enterprising, industrious population, and thus secure for all the purposes of commerce and personal travel; for there is no question but that a permanent *road way* would soon follow the telegraphic line, and thus the tide of immigration would set in this direction, and the whole country be soon populated, and commerce spread its sails from our side of the Pacific, far over its placid surface, to gather rich harvests from foreign lands.

It requires but a movement on the part of our national councils to commence this work—a work truly, as we have before remarked, national in its character—of opening first a *telegraphic* communication, and afterwards a permanent highway for travel and commerce, leaving it to individual enterprise to provide the means of transportation and reap the golden harvest.

The attention of Congress is respectfully called to the importance of this plan, first, in a national point of view; second, from its economy of execution; and, third, from its expediency.

We have daily proofs of the zeal manifested and manifesting by foreign governments to effect an overland communication across our continent by other routes, which, though they may appear to be shorter, can be shown to be much inferior, and longer in time to accomplish, than that we here propose. And shall we lie idle and allow them to enter upon a work naturally our own, and in which we, as a commercial and free people, are so deeply interested?

It has been shown that the route of the Rio Grande possesses advantages over every other, in point of economy both of time and money, for its execution. To render this plain, we have only to consider the great difference of *latitude* and *longitude* between the two points of starting, from the waters of the gulf on the Atlantic and the points reached on the waters of the Pacific, either with reference to our Oregon possessions, or our trade with the Indies, or the islands of the Pacific. *Chagres*, the Atlantic point of departure proposed, to cross the continent, lies in north latitude 9° 19′, and west longitude 1° of Washington; while the mouth of the *Rio Grande* lies in north latitude 25° 56′, and west longitude 20° of Washington—a difference of 17° 37′ of latitude, and 19° of longitude, all in favor of the latter. Again, *Panama*, on the Pacific, lies in north latitude 9°, and in west longitude 1° 10′ of Washington; and San Diego, on the Pacific, in north latitude 33°, and west longitude 40° of Washington; and the mouth of the gulf of California in north latitude 23°, and west longitude 32° of Washington—a difference of 24° of latitude, and 38° 50′ of longitude, in favor of the Rio Grande route; and, with respect to our trade with the Indies or China, (Canton, for instance, which lies in the same latitude with the mouth of the gulf of California,) it would be greatly advantaged. And, lastly, in favor of the mail route to Astoria by San Francisco*, a difference of 24° of latitude, and 20° of longitude.

Astoria lies in 45° north latitude and 40° west longitude of Washington,

*San Francisco is in latitude 37 degrees north, and longitude 45 degrees west, of Washington.

which to reach from New Orleans, by Chagres, would require to sail or steam through 65° of latitude and 66° of longitude.

These are important facts in proof of the gain in time of the Rio Grande route; and to determine the gain, in point of expense, we have not only to compare the cost of construction from Chagres, or across to Tehuantepec, but also the cost of steaming or sailing over *six thousand miles* to gain the same point.

To give some idea of the distance which the mail to Astoria is now proposed to be taken, reference may be had to the advertisement of the Post Office Department, an extract from which is in the following words:

"No. 3.—Proposals for carrying the mail from Astoria, by San Francisco, in California, Monterey, and such other places on the coast as the Postmaster General may direct, to Panama, New Granada, with an extension to Chagres, 4,660 miles and back, every *two months*, in steamships between Astoria and Panama, and by suitable land conveyance between Panama and Chagres. Proposals for once a month conveyance will be considered.

"No. 2.—From Charleston, S. C., by St. Augustine, Key West, and Havana, in the island of Cuba, to Chagres, in New Granada, 2,140 miles and back, once every two months, in steamships. Proposals for once a month, &c., will be considered."

Here we find that the distance to be overcome by the present proposed mail route from Charleston to Astoria, is 6,800 miles; while by the route of the Rio Grande, it would not be more than 3,000 miles, and by telegraph but 2,000 miles, counting *time* as distance. By the plan of connecting the telegraph with the steamboat, intelligence might be communicated between Washington and Astoria, or any point of the Pacific between, in fifteen days; thus a weekly in place of six or eight weeks' intercourse may be established between the two places.

To effect results so important, a very small outlay would in the first place be required, having reference to conveying written intelligence by means of the telegraph; the cost of constructing which, across from the Rio Grande to one of the navigable rivers of the gulf of California, would be but $100,000, which, as previously stated, would be little more than the outlay for only one year in carrying the mail by the other route. (See paper A.)

Such a plan could be carried into execution in less than one year. Steamboats of good draught now run up the Rio Grande, at the lowest stage of its waters, to Laredo, 700 miles above its mouth. This point may be attained in about five days from New Orleans: the distance, then, by telegraph to the California waters, would be as *naught* in mental travelling; and the steamer of the Pacific would convey the intelligence communicated by telegraph to Astoria in less than ten days. Sail vessels have run the distance in seventeen days, and a steamer could do it in half the time on an average. (See paper B.) This is a subject worthy the attention of Congress; and we may indulge the hope that when presented to their consideration they will take such action on it as to authorize the Postmaster General to construct and establish a telegraphic communication across from such point on the Rio Grande as may be found most expedient, to such point of the navigable waters of the gulf of California accessible to steamboats, and to contract for transmitting intelligence

between New Orleans and Astoria from each end of the telegraph line. (See paper C.)

A.

In conversation with the president of the telegraph company in this city, on the cost of constructing a mile of wires, he observed that for a single wire the estimate was only eighty dollars per mile of wires, and the expense of the double wire would not double this amount.

Wonderful powers of the telegraph.

The London Magazine of Science states that the electric company have invented a machine which will communicate intelligence simultaneously to some forty or fifty British cities—among them Glasgow, Manchester, Bristol, Liverpool, Leeds, Sheffield, Nottingham, Hull, and York. It can communicate to all these places from 1,000 to 2,000 letters per minute.

Mr. Barnes, of the Cincinnati telegraph office, communicated and read despatches to and from Louisville without the use of the regulating instrument. It was done by the ear. He was enabled to tell the letter indicated each time by the slight difference in the interval between the ticks: by this means a long despatch may be communicated in a brief time.

But both these surprising powers of the telegraph are, I understand, familiar to the telegraph company here.

B.

From the Boston Traveller.

The brig Henry, which left Newburyport on the 23d of February, 1846, for Oregon, arrived at its destination, Oregon city, in March last. A letter from a passenger on board the brig, dated March 17th, which we have had the pleasure of reading, states that the brig arrived in safety, the passengers and crew all well. There are in the city two churches, two hotels, two flour mills, two saw mills, and a printing office, from which is issued a paper every fortnight. The city is rapidly increasing, and buildings are continually going up. Goods find a ready market and a fair profit. The writer says it is a good place for immigrants; but the land route is better than the voyage by water. The brig had 231 days' passage to the Sandwich Islands. She laid there for three months to refit. Most of her passengers remained there. From the islands, seventeen days' sailing brought her to Columbia bar. Here she met with a gale which lasted eight days, and by which she was driven to Vancouver's island; then put into Near bay, in the straits of Juan de Fuca, where she lay one week; and from thence proceeded about 60 miles to Fort Victo-

ria, one of the Hudson's Bay Company's stations, for provisions and water.

The brig remained there a few days, and, recommencing her voyage, entered the mouth of the Columbia river early in March, in safety.

C.

The Hon. W. J. Brown, our most efficient and talented Second Assistant Postmaster General, has received a letter by telegraph from Masillon, in the west, in answer to one addressed by him to a gentleman in that city. It was dated Masillon, 1 o'clock a. m., and received here long before 2 o'clock, transcription and messenger's time included.

This is indeed annihilation of space. The line which this news has travelled is this:

From Masillon to Columbus, Ohio - - - -	75 miles.
Columbus to Zanesville, Ohio - - - -	73
Zanesville to Wheeling - - - -	54
Wheeling to Pittsburg - - - -	80
Pittsburg to Harrisburg - - - -	200
Harrisburg to Philadelphia - - -	98
Philadelphia to Baltimore - - -	97
Baltimore to Washington - - -	40
Total - - - - -	717

If this is not annihilation of space, I do not know what it may be called.

X.

1. Sess. 30. Cong.
Senate Mis. № 51

MILLS' MAP

of the several Routes

Proposed

to the PACIFIC OCEAN from the

HEAD WATERS OF THE MISSOURI,

to the Isthmus of Darien

Lith. of E. Weber & Co. Balto.